I CLAIM:

1. A light deflecting electric motor comprising:

a stator assembly including a base, a fixed shaft fixed to the base and a stator mounted on the base;

a rotor assembly including a rotating member rotatably mounted on a plurality of bearings further mounted on the fixed shaft, a polygon mirror mounted on the rotating member and a rotor mounted on the rotating member, the rotor assembly having a center of gravity located between the bearings; and

a balancing plane provided in the vicinity of a plane which is generally perpendicular to a center of rotation of the rotor assembly and passes the center of gravity of the rotor assembly.

2. The motor according to claim 1, wherein each bearing comprises a ball bearing including a number of rolling members each made of ceramic.

3. The motor according to claim 1, wherein the rotor assembly has a balancing groove formed in a portion thereof located below the bearings.

4. The motor according to claim 2, wherein the rotor assembly has a balancing groove formed in a portion thereof located below the bearings.

5. The motor according to claim 3, wherein the rotor is generally annular and includes a rotor magnet radially opposed

to the stator with respect to the rotor and a rotor yoke provided on the rotating member to hold the rotor magnet, and the balancing groove is formed in the rotor yoke.

6. The motor according to claim 4, wherein the rotor is generally annular and includes a rotor magnet radially opposed to the stator with respect to the rotor and a rotor yoke provided on the rotating member to hold the rotor magnet, and the balancing groove is formed in the rotor yoke.

7. The motor according to claim 3, wherein the rotor is generally annular and includes a rotor magnet radially opposed to the stator with respect to the rotor and a rotor yoke provided on the rotating member to hold the rotor magnet, and the balancing groove is formed in the rotating member.

8. The motor according to claim 4, wherein the rotor is generally annular and includes a rotor magnet radially opposed to the stator with respect to the rotor and a rotor yoke provided on the rotating member to hold the rotor magnet, and the balancing groove is formed in the rotating member.

9. The motor according to claim 3, wherein the rotor is generally annular and includes a rotor magnet radially opposed to the stator with respect to the rotor and a rotor yoke provided on the rotating member to hold the rotor magnet, and the balancing groove is defined between the rotating member and the rotor yoke.

10. The motor according to claim 4, wherein the rotor is generally annular and includes a rotor magnet radially opposed to the stator with respect to the rotor and a rotor yoke provided on the rotating member to hold the rotor magnet, and the balancing groove is defined between the rotating member and the rotor yoke.

11. The motor according to claim 3, wherein the polygon mirror is generally annular and has a reflecting surface, and the balancing groove is disposed inside the reflecting surface of the polygon mirror.

12. The motor according to claim 4, wherein the polygon mirror is generally annular and has a reflecting surface, and the balancing groove is disposed inside relative to the reflecting surface of the polygon mirror.

13. The motor according to claim 5, wherein the polygon mirror is generally annular and has a reflecting surface, and the balancing groove is disposed inside relative to the reflecting surface of the polygon mirror.

14. The motor according to claim 6, wherein the polygon mirror is generally annular and has a reflecting surface, and the balancing groove is disposed inside relative to the reflecting surface of the polygon mirror.

15. The motor according to claim 7, wherein the polygon mirror is generally annular and has a reflecting surface, and

the balancing groove is disposed inside relative to the reflecting surface of the polygon mirror.

16. The motor according to claim 8, wherein the polygon mirror is generally annular and has a reflecting surface, and the balancing groove is disposed inside relative to the reflecting surface of the polygon mirror.

17. The motor according to claim 9, wherein the polygon mirror is generally annular and has a reflecting surface, and the balancing groove is disposed inside relative to the reflecting surface of the polygon mirror.

18. The motor according to claim 10, wherein the polygon mirror is generally annular and has a reflecting surface, and the balancing groove is disposed inside relative to the reflecting surface of the polygon mirror.